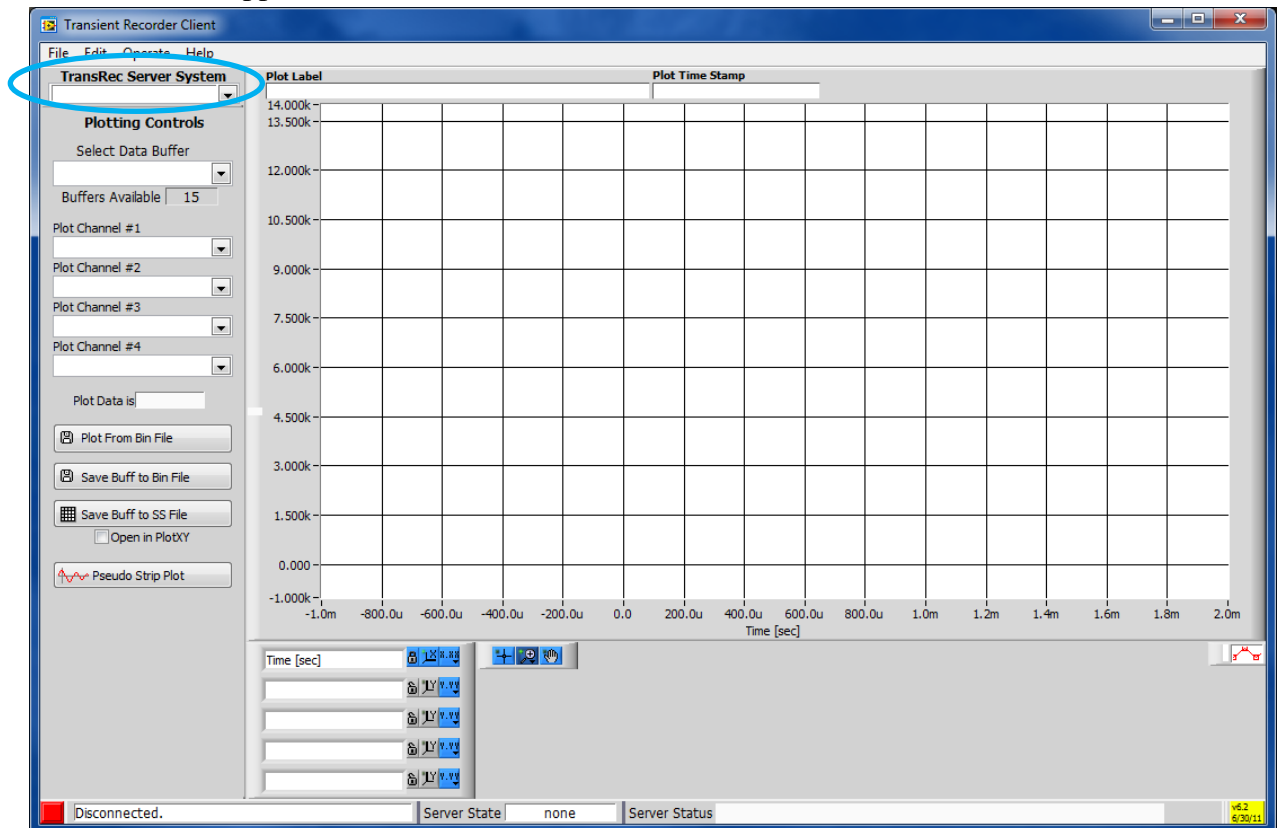


How to run transient recorder for MTA solenoid testing

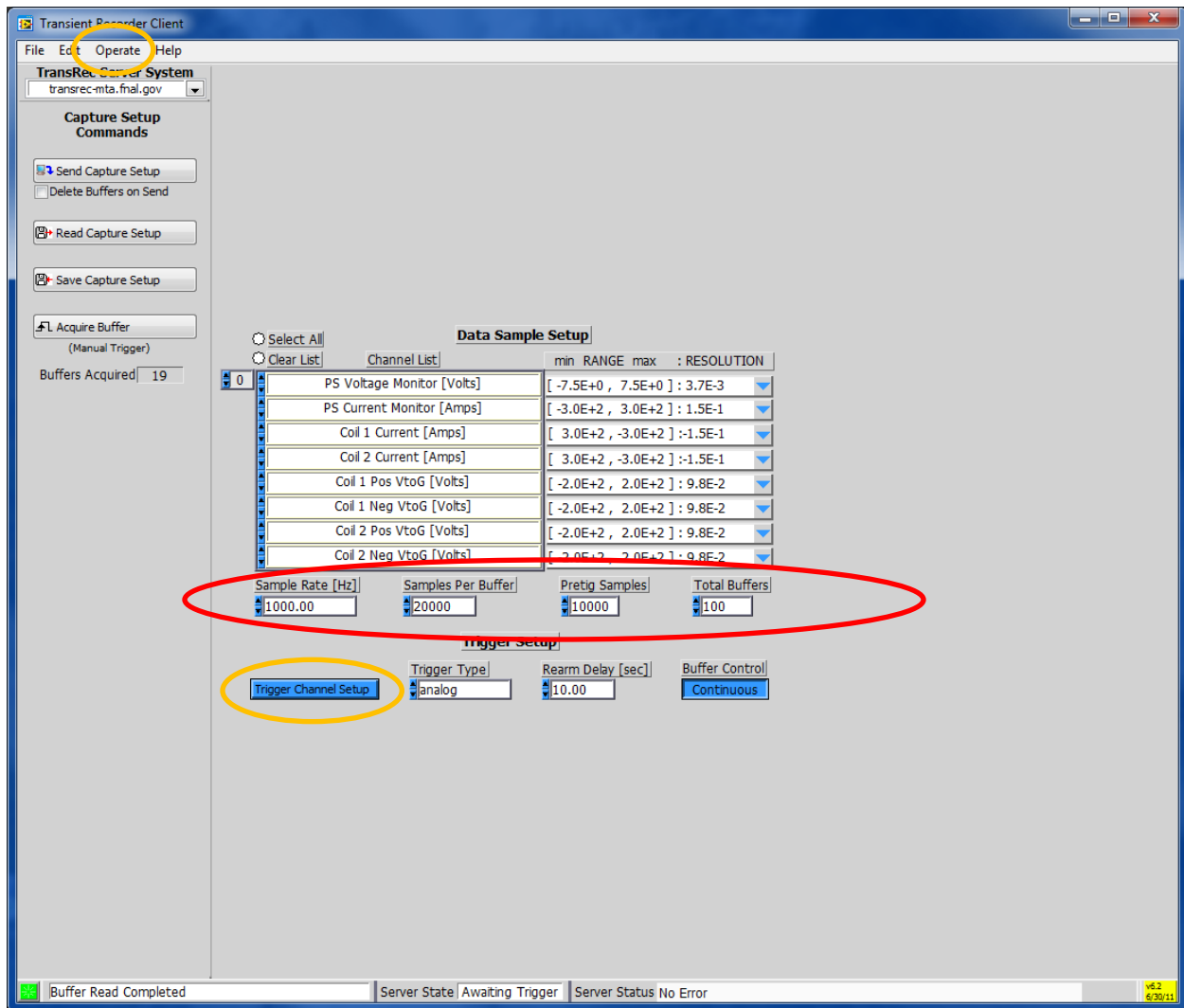
J Volk April 25, 2013\

Steps 1 to 4 are already done on the MTA machine in the LINAC gallery.

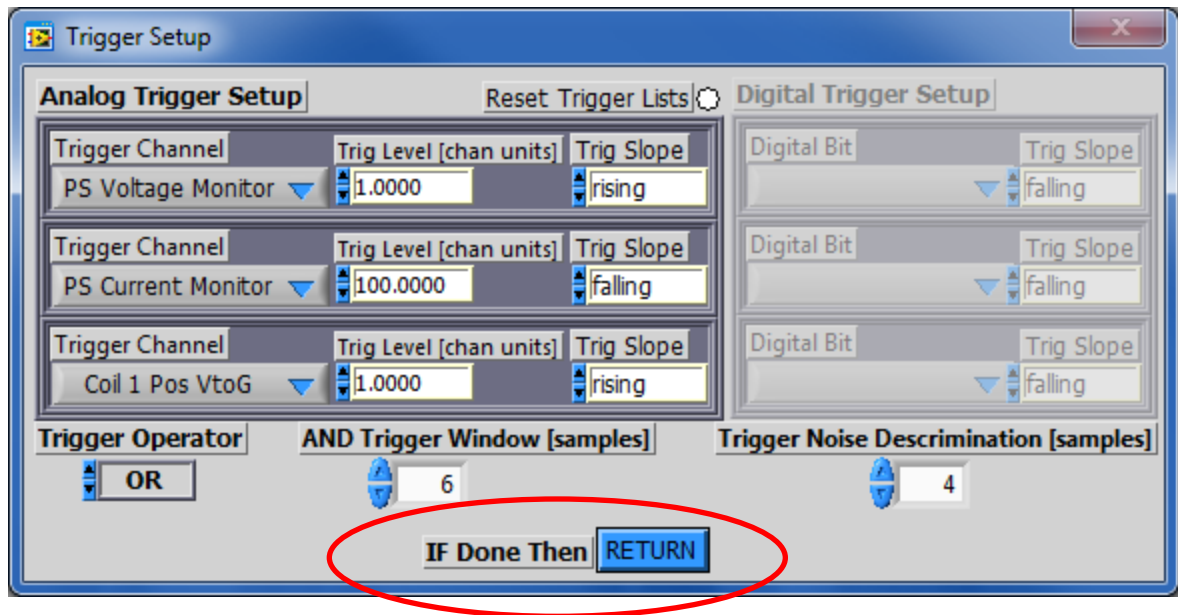
1. Go to AD EE support web page <http://www-bdees.fnal.gov/>
2. On the left click on Projects
3. In that page click on Transrec Software Then on transrec_v62.zip save this file to your computer
4. Un zip the files and install the software there are directions to walk you through the process.
5. A LabView icon will appear on the desk top labeled Transrec click on this
6. A window will appear that looks like;



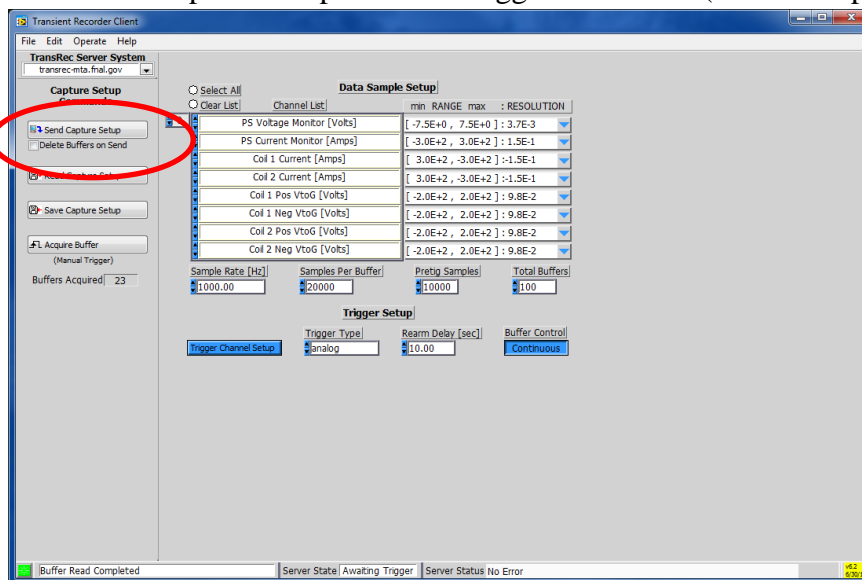
7. In the upper left (blue ellipse) click on the TransRec Server System drop down menu.
8. Look for transrec-mta.fnal.gov this will connect to the proper data stream.
9. On the top ribbon click on Operate (orange ellipse below) then Capture setup this will set the triggers for the data buffer.



10. The Sample Rate will determine how fast data points are taken see the red ellipse the Samples Per Buffer determines the length of the buffer, the Pretig Samples will determine how much data is saved before the trigger. The example above is set for 1 kilo hertz sampling starting 10 seconds before the trigger and going ten seconds after the trigger. These can be changed by the up and down arrows or by direct typing into the boxes.
11. The Trigger Channel Setup orange ellipse click on that an another dialogue box opens



12. There are three triggers that can be set to freeze the data buffer and record the data. The left sets of pull down menus allow for selection of what to trigger on. The next three pull down menus set the levels of the trigger and the third set toggles between rising and fall edges for the event.
13. The trigger can be a logical AND or OR Also the number of consecutive events that have to occur before the trigger. This is to eliminate false trigger due to noise on the system.
14. When the changes are made click If Done Then RETRUN (see the red ellipse above).
15. Then Send Capture Setup to set the trigger conditions (see red ellipse below).



16. Once this is set on the top ribbon click on Operate and then on Plot.
17. On the left there is a Plot from Bin File to plot existing data. There is also a Save Buff to SS file this puts the data where you want for later analysis.

